APPRAISAL OF ECONOMIC LOSS

Steven Furman

Prepared for: Jeanne M. O'Grady, Esq.
SPEISER KRAUSE
Counsellors at Law
800 Westchester Avenue
Suite 608
Rye Brook, NY 10573

Prepared by: Gary M. Crakes, PhD

Table of Contents

Exhibi	<u>Lt</u>	page
	Letter of transmittal	1
	Discussion	2,3
I	Summary of appraisal	4
II	Work-life and life expectancy	5
III	Average hourly earnings of production workerssince 1932	6
IV	Federal Income Tax Schedules for Individuals: Tax tables, standard deductions and personal exemptions, 2016 and 2017 (table)	7
v	Taxable returns: Adjusted gross income (AGI), income tax and tax ratio, 1947-2014 (table)	8
VI	Employer Costs for Employee Compensation: September 2016, U. S. Department of Labor, Bureau of Labor Statistics, December, 2016 (table)	9
VII	Estimated annual value of household services (table)	10
	Gary M. Crakes: Curriculum vitae	

MAHER, CRAKES AND ASSOCIATES

ECONOMIC CONSULTANTS 860 WARD LANE CHESHIRE, CONNECTICUT 06410

> (203) 272-1205 FAX: (203) 250-8452

JOHN MAHER, PHD 1925 - 2005 GARY M. CRAKES, PHD

November 19, 2018

RE: Steven Furman

Jeanne M. O'Grady, Esq. SPEISER KRAUSE Counsellors at Law 800 Westchester Avenue Suite 608 Rye Brook, NY 10573

Dear Ms. O'Grady:

The following report on the economic loss of the above named is an objective estimate of the loss in this case, measured as scientifically and accurately as the data permit.

If you have questions about calculations or concepts or feel that additional aspects should be explored, please contact us. Exhibits I and II in this report are prepared to be suitable as enlargements for use at trial.

If the case is not settled, please schedule time for appearance at trial sufficiently in advance that we may plan accordingly.

Respectfully submitted,

Gary M. Crakes, PhD

GMC:dc

Discussion of appraisal: Steven Furman

Steven Furman was born 1960 (1960) and died September 11, 2001 (2001.70) at age 41.00 years with life expectancy of 35.80 years and work-life to age 70 of 29.00 years. See Exhibit II.

In this appraisal of the economic loss of earning capacity, we have calculated the lifetime earnings of Steven Furman with work-life to age 70 based on a 2001 annual earnings rate of \$229,770. Calculation of the value of lifetime earnings based on a 2001 annual earnings rate of \$229,770 results in earnings loss for the 16.30 years in the past of \$4,615,358 with adjustment for each year in the past by the annual percentage change in general levels of earnings. Calculation of future discounted earnings assumes that the future average annual rate of growth of earnings will be equal to the discount rate. With this assumption and current estimated annual earnings of \$340,940, future discounted earnings are \$4,329,938. Total discounted lifetime earnings based on a 2001 annual earnings rate of \$229,770 are \$8,945,296. This value appears as the first entry to the summary, Exhibit I.

Next shown in Exhibit I is a deduction of 15% of gross earnings as an allowance for personal maintenance expenses. (See Consumer Expenditures in 2015, U.S. Department of Labor, Bureau of Labor Statistics, April, 2017.) With this deduction, discounted economic loss is \$7,603,502.

Finally, we have included two additional values. First, we have included the value of fringe benefits calculated at (For the average benefit payments in the 15% of earnings. United States, see Exhibit VI with data from the Bureau of Labor Statistics, U.S. Department of Labor.) Second, we have included the value of Steven Furman's household Data for the estimate are presented in Exhibit VII and are derived from "Time Use During the Great Recession", Mark Aguiar, Erik Hurst, and Loukas Karabarbounis, American Economic Review, August, 2013 and wage rates from the Bureau of Labor Statistics, U.S. Department of Labor. Adjustment and application of the appropriate values provides an estimate of discounted loss of \$236,548, canceling future rates of increase by the discount rate. With the addition of these values, discounted economic loss is \$9,181,844. See Exhibit I.

It is our opinion that the discounted economic loss in this case is \$9,181,844.

Summary of appraisal: Steven Furman

			Discounted values
I	Basic earnings based on 2001 annual earnings rate of \$229,770		\$8,945,296
II	Less personal maintenance at 15% of earnings		-1,341,794
		Subtotal	\$7,603,502
III	Plus value of fringe benefits		1,341,794
		Subtotal	\$8,945,296
IV	Plus value of household services		236,548
	Total net discounted economic loss		\$9,181,844

5

Exhibit II

WORK-LIFE AND LIFE EXPECTANCY

Steven Furman

		Year and fractional equivalent	Number of years
Α.	Date of birth:		
	1960	1960	
В.	As of date of death:		
	September 11, 2001	2001.70	
	1. Age		41.00
	2. Work-life to age 70		29.00
	3. Life expectancy		35.80

Source:

3. National Vital Statistics Reports, 2001,
U. S. Department of Health and Human Services,
National Center for Health Statistics, Volume 52, Number 14,
February 18, 2004.

TABLE 98. Average Hourly Earnings of Production or Nonsupervisory Workers 1 on Private Nonagricultural Payrolls, by Industry Division, 1932-74

[In dollars]

	1		Contract		fanufactui	ing	Manu- factur-						
Year and month	Total private	Mining construc- tion		Total 2	Durable goods	Nondur- able goods	ing excluding overtime	tion and public utilities	Total	Whole- sale	Retail	ance, and real estate	Serv Ices
332				0.441	0.492	0.412				<u>.</u>			
N3				. 437	. 467	- 419				;			
34				. 528	. 550	. 505							
36				.544	.571	. 520				0.610	 		
35				. 550	. 580	. 519				. 628			
97				.617	. 667	. 566				.658			
38				. 620	. 679	. 572				.674 .685	0.484		
39				. 627	. 691	. 571				.711	.494		
40				.655	. 716 . 799	. 590 . 627	0, 691			.763	.518		
41				.726	. 937	. 709	. 798			.828	.559		
42				. 851	1.048	.787	. 881			.898	.606		
¥					1. 105	.844	. 933			.948	.653		
44				1.011	1. 099	.886	3.949			.990	.699		
45				1.016	1.144	. 995	1.035			1. 107	.797		*****
16				1.075	1. 278	1. 145	1.18	******	0.940	1, 220	4.838	1, 140	
17	1. 131	1.469	1. 541	1.217	1. 395	1, 250	1. 29		1.010	1.308	.901		
48	1.225	1.664	1.713	1.328	1. 453	1. 295	1.34		1.060	1.360	.951	1. 260	
(9	1. 275	1.717	1. 792	1.378	1. 519	1. 247	1. 39		1.100	1.427	.983	1.340	
50	1.335	1.772	1.863	1.440			1.51	*	1.18	1.52	1.06	1.45	
81	1.45	1.93	2.02	1.56	1.65	1.44	1.59		1. 23	1.61	1.09	1.51	
52	1.52	2.01	2. 13	1.65	1.75	1.51	1.68		1.30	1.70	1.16	1.58	
53	1.61	2.14	2, 28	1.74	1.86	1.58	1.73		1.35	1.76	1.20	1.65	
54	1.65	2.14	2.39	1.78	1.90	1.62	1.79			1.83	1.25	1.70	
55	1.71	2.20	2.45	1.86	1.99	1.67			1.40	1.94	1.30	1.78	
56	1.80	2. 33	2.57	1.95	2.08	1.77	1.89		1.47	2.02	1.37	1.84	
67	1.89	2.46	2.71	2.05	2 19	1.85	1.99		1.54	2.09	1.42	1.89	
58	1.95	2.47	2.82	2.11	2.26	1.91	2.05 2.12		1.60 1.66	2.18	1.47	1.95	•
89	2.02	2.56	2, 93	2.19	2.36	1.98 2.05	2.20		1.71	2, 24	1.52	2.02	
60	2.09	2.61	3.08	2.26	2.43 2.49	2.11	2.25		1.76	2.31	1.56	2.09	
61	2.14	2.64	3. 20	2.32	2.56	2 17	2.31		1.83	2.37	1.63	2.17	
62	2.22	2.70	3. 31	2.39 2.46	2.63	2, 22	2.37	• • • • • • • • • • • • • • • • • • • •	1.89	2.45	1.68	2.25	
63	2.28	2, 75	3. 41 3. 55	2.53	2 m	2, 29	2.44	2. 68	1.96	2.52	1.75	2.30	i.
64	2.36 2.45	2.81 2.92	3.70	2.61	2, 79	2.36	2, 51	3.03	2.03	2.61	1.82	2.39	1 2
65	2.56	3.05	3.69	2.72	2.90	2,45	2, 59	3.11	2.13	2.73	1.91	2.47	2
66	2.68	3.19	4.11	2.83	3.00	2, 57	2.7	3. 24	2.24	2.88	2.01	2, 58	2
47	2.85	3.35	141	3.01	3.19	2.74	2.88	3.42	2.40	3.05	2.16	2.76	2
68	3.04	3.61	1.79	3. 19	3.38	2,91	3.06	3.64	2.55	3.23	2.30	2.93	2
70	3. 22	3.85	5.24	3.36	3. 55	3.08	3.24	3.85	2.71	3.44	2.44	3.08	2.
//V	3.44	4.06	6, 69	3.57	3.79	3, 26	3.44	4.21	2.86	3.67	2.57	3.27	3.
)/1)/2		Lii	6.03	3.81	4.06	3.47	3, 66	4.64	3. 01	3.88	2.70	3.42	3.
	2.92	4.72	6.38	4.07	4.33	3,68	3.89	5. 03	3.20	4.12	2.57	3.57	3.
)73	4. 22	5. 20	8.76	4.40	4.68	3.98	4.23	5.40	3.47	4.49	3. 10	3.81	3.
//	1.22	0.20	J. 73										

² Excludes data on nonoffice salespersons.

⁴ Beginning 1947, includes data on cating and drinking places.

⁵ 11-month average.

⁶ Prior to January 1856, data were based on the application of adjustment factors to gross average hourly earnings. (For a detailed description see the Monthly Labor Review, May 1950, pp. 557-540; reprint available, serial No. R 2020.)

Norz: Data include Alaska and Hawaii beginning 1959,

		Privat	e Sector				S	ervice	Industry		
1975	\$ 4.53	1993	\$11.03	2011	\$19.46	1975	\$4.02	1993	\$10.60	2011	\$19.21
1976	4.86	1994	11.32	2012	19.77	1976	4.31	1994	10.87	2012	19.52
1977	5.25	1995	11.64	2013	20.14	1977	4.65	1995	11.19	2013	19.91
1978	5.69	1996	12.03	2014	20.60	1978	4.99	1996	11.57	2014	20.36
1979	6.16	1997	12.49	2015	21.03	1979	5.36	1997	12.05	2015	20.83
1980	6.66	1998	13.00	2016	21.56	1980	5.85	1998	12.59	2016	21.34
1981	7.25	1999	13.47			1981	6.41	1999	13.07		
1982	7.68	2000	14.00			1982	6.92	2000	13.60		
1983	8.02	2001	14.53			1983	7.30	2001	14.16		
1984	8.33	2002	14.95			1984	7.64	2002	14.56		
1985	8.58	2003	15.35			1985	7.95	2003	14.96		
1986	8.76	2004	15.67			1986	8.16	2004	15.26		,
1987	8.98	2005	16.11			1987	8.49	2005	15.71		
1988	9.29	2006	16.76			1988	8.88	2006	16.42		
1989	9.66	2007	17.43			1989	9.39	2007	17.11	•	
1990	10.19	2008	18.08			1990	9.71	2008	17.77		
1991	10.50	2009	18.62			1991	10.05	2009	18.35		
1992	10.76	2010	19.04		•	1992	10.33	2010	18.78		

Source: Bureau of Labor Statistics, U. S. Department of Labor

Federal Income Tax Schedules for Individuals: Tax tables, standard deductions and personal exemptions, 2016 and 2017

20	016					2017	7
		_	 _	 _			

Tax Rates	for Married Coupl	es Filing Jointly						
Taxable Income	Rate	Taxable Income	Rate					
\$0-\$18,550	10%	\$0-\$18,650	10%					
\$18,550-\$75,300	15%	\$18,650-\$75,900	15%					
\$75,300-\$151,900	25%	\$75,900-\$153,100	25%					
\$151,900-\$231,450	28%	\$153,100-\$233,350	28%					
\$231,450-\$413,350	33%	\$233,350-\$416,700	33%					
\$413,350-\$466,950	35%	\$416,700-\$470,700	35%					
Over \$466,950	39.60%	Over \$470,700	39.60%					
Tax Rates f	Tax Rates for Individuals Filing Single Returns							
Taxable Income	Rate	Taxable Income	Rate					
\$0-\$9.275	10%	\$0-\$9.325	10%					

Taxable Income	Rate	Taxable Income	Rate
\$0-\$9,275	10%	\$0- \$9,325	10%
\$9,275-\$37,650	15%	\$9,325-\$37,950	15%
\$37,650-\$91,150	25%	\$37,950-\$91,900	25%
\$91,150-\$190,150	28%	\$91,900-\$191,650	28%
\$190,150-\$413,350	33%	\$191 , 650-\$416,700	33%
\$413,350-\$415,050	35%	\$416,700-\$418,400	35%
Over \$415,050	39.60%	Over \$418,400	39.60%

Tax Rates for Individuals Filing as Head of Household

Taxable Income	Rate	Taxable Income	Rate
\$0-\$13,250	10%	\$0-\$13,350	10%
\$13,250-\$50,400	. 15%	\$13,350-\$50,800	15%
\$50,400-\$130,150	25%	\$50,800-\$131,200	25%
\$130,150-\$210,800	28%	\$131,200-\$212,500	28%
\$210,800-\$413,350	33%	\$212,500-\$416,700	33%
\$413,350-\$441,000	35%	\$416,700-\$444,550	35%
Over \$441,000	39.60%	Over \$444,550	39.60%

Tax Rates for Married Individuals Filing Separately

Taxable Income	Rate	Taxable Income	Rate
\$0-\$9,275 \$9,275-\$37,650 \$37,650-\$75,950 \$75,950-\$115,725 \$115,725-\$206,675 \$206,675-\$233,475 Over \$233,475	10% 15% 25% 28% 33% 35% 39.60%	\$0-\$9,325 \$9,325-\$37,950 \$37,950-\$76,550 \$76,550-\$116,675 \$116,675-\$208,350 \$208,350-\$235,350 Over \$235,350	10% 15% 25% 28% 33% 35% 39.60%
		1-00,000	

Standard Deduction		•	Personal	Exemption 2	ı
	2016	2017	2016	2017	
Married, joint	\$12,600	\$12,700	\$4,050	\$4,050	
Single	6,300	6,350			
Head of household	9,300	9,350			
Married, separate	6,300	6,350			

Exhibit V

Taxable returns: Adjusted gross income (AGI), income tax, and tax ratio, 1947-2014

	Adjusted gross income (AGI)	Income tax	Ratio: of		Adjusted gross income (AGI)	Income tax	Ratio of
	billions	in billions	tax to		billions	in billions	tax to
Year	of \$	of \$	AGI	Year	of \$	of \$	AGI
1947	135.3	18.1	.1336	1988	2,989.9	411.8	.1377
1948	142.1	15.4	.1087	1989	3,158.3	432.1	.1368
1949	138.7	14.5	.1049	1990	3,298.9	446.3	.1353
1950	158.5	18.4	.1160	1991	3,335.2	447.2	11341
1951	185.1	24.2	.1309	1992	3,483.9	474.9	.1363
1952	198.5	27.8	.1401	1993	3,564.0	500.7	.1405
1953	212.4	29.4	.1386	1994	3,736.6	532.6	.1425
1954	209.7	26.7	.1272	1995	4,007.6	586.1	.1462
1955	229.6	29.6	.1290	1996	4,341.9	655.4	.1510
1956	249.6	32.7	.1312	1997	4,785.2	727.3	.1520
1957	262.2	34.4	.1312	1998	5,160.2	783.5	.1518
1958	262.2	34.3	.1310	1999	5,580.8	870.9	.1561
1959	287.8	38.6	.1332	2000	6,083.3	980.5	.1612
1960	297.2	39.5	.1330	2001	5,847.1	887.9	.1519
1961	311.3	42.2	.1356	2002	5,641.1	797.0	.1413
1962	330.6	44.9	.1358	2003	5,746.6	748.0	.1302
1963	350.4	48.2	.1376	 2004	6,265.5	832.0	.1328
1964	376.0	47.2	.1254	2005	6,856.7	934.8	.1363
1965	400.3	49.5	.1209	2006	7,439.5	1,023.9	.1376
1966	450.2	56.1	.1246	2007	8,072.3	1,115.8	.1382
1967	487.4	62.9	.1291	2008	7,583.5	1,031.6	.1360
1968	538.3	76.6	.1424	2009	6,777.7	865.9	.1278
1969	588.2	86.6	.1472	2010	7,246.2	951.7	.1313
1970	610.3	83.8	.1370	2011	7,693.2	1,045.5	.1359
1971	651.3	85.2	.1309	2012	8,442.2	1,188.0	.1407
1972	717.4	93.6	.1300	2013	8,426.0	1,218.5	.1446
1973	799.7	108.1	.1350	2014	9,102.6	1,355.3	.1489
1974	800.2	123.7	.1410				
1975	893.3	124.4	.1385				
1976	1,004.4	140.8	.1402				
1977	1,097.7	158.5	.1444				
1978	1,241.2	186.7	.1504				
1979	1,402.2	213.3	.1521				
1980	1,556.1	249.1	.1601				
1981	1,721.2		.1640				
1982	1,803.8	277.6	.1539				
1983	1,895.2	274.2	.1447				
1984	2,110.5	304.0	.1440				
1985	2,259.0	321.9	.1425				
1986	2,440.2	360.6	.1478				
1987	2,700.8	367.5	.1361				

Source: Annual issues of <u>Individual Income Tax Returns</u>, Statistics of Income, Internal Revenue Service

Table 1. Employer costs per hour worked for employee compensation and costs as a percent of total compensation: civilian workers, by major occupational and industry group, September 2018

9 100.0 2 71.5 7 28.5 9 2.4 1.8 0.3 1.8 0.3 0.5 7.9 0.1	517.79 12.72 5.07 0.89 0.42 0.20 0.14	Percent 100.0 70.4 29.6	1 4	ssionai, ind	profe	All kers ¹		Compensation
9 100.0 2 71.5 7 28.5 8 2.4 1.6 0.8 0.3 0.5 0.3 0.5 7.9 0.1 7.7	\$17,79 12,72 5.07 0.69 0.42 0.28 0.14	100.0 70.4		Parrent	Management, professional, and related		1	component
7 71.5 7 28.5 7 28.5 9 2.4 1.8 0.8 0.3 1.6 0.3 0.5 7.9 0.1 7.7 0.1	12.72 5.07 0.89 0.42 0.28 0.14	70.4	824 BB	- wicesin	Cost	Percent	Cost	
7 71.5 7 28.5 7 28.5 9 2.4 1 1.6 0.8 0.3 1.5 0.5 0.5 7.9 0.1	5.07 0.89 0.42 0.28 0.14		747.00	100.0	\$58.67	100.0	\$34,15	Total compensation
5.0 2.4 1.8 0.8 0.3 1.8 0.5 0.5 0.7 0.7	0.69 0.42 0.28 0.14	29.6	17.56	68.2	38,55	68.6	23.42	Wages and salaries
2.4 1.6 0.8 0.3 1.6 0.8 0.3 0.5 7.9 0.1	0.42 0.28 0.14		7.38	31,8	18.01	31.4	10.73	Total benefits
1.8 0.8 0.3 1.6 0.5 0.3 0.5 7.9 0.1 7.7	0.28 0.14	6.6	1.65 0.62	7.9 3.8	4.49 2.17	6.9 3.4	2.36 1.15	Patd leave
0.3 1.8 0.8 0.3 0.5 7.9 0.1 7.7		3.3 2.0	0.50	2.3	1.30	2.1	0.71	Holday
0.8 0.3 0.5 7.9 0.1 7.7 0.1		0.9	0.21 0.11	1.3 0.5	0.72	1.0 0.4	0,35 0,14	SickPersonal
0.3 0.5 7.9 0.1 7.7 0.1	0,29	2.3	0,68	3.6	2.02	3.1	1.05	Supplemental pay
7.9 0.1 7.7 0.1	0.15 0.05	0.6 0.1	0.15	0.3	0.17 0.08	0.8 0.2	0,26 0.06	Shift differentials
0.1 7.7 0.1	0.09	1,7	0.42	3.1	1.77	2.2	0,74	Nonproduction bonuses
7.7	1.41	9.5	2.37	8.1	4.60	8.8	3.00	Insurance
0.1	0.02 1.37	0.1 9.1	0.03 2.27	7.7	0.08 4.36	0.1 8.4	0.04 2.85	Life
(°)	0.02	0.2	0.04 0.03	0.2	90.09 80.0	0.2	0.05	Short-term clsability
1	(5)	0.1	- 1			- 1	· .	Long-term disability
	0.79 0.64	3.6 1,8	0.90 0.44	5.9 3,7	3,35 2,08	5.2 3.2	1.76 1.11	Retirement and savings
	0.15	1,8	0,45	2.2	1,27	1.0	0,66	Delined contribution
	1,69	7.5	1,88	6.3	3.55	7.5	. 2,56	Legally required benefits
	1.06 0.85	5.8 4.7	1.46	5.3 4.1	3.00 2.35	5.5 4.4	1,89	Social Security and Medicare
1,2	0.21	1.1	0.29	1.1	0.65	1.1	0.39	Medicare
	0,04 0,16	0.1 0.6	0.04 0.18	(⁶)	0.02 0.18	0.1	0.03 0.17	Federal unemployment insurance
	0.44	0.9	0.23	0.7	0.37	1,4	0,47	Workers' compensation
TET -145	industry group			Occupational group				
			Production,		Natural			
iervice-		Goods- producing ²		transportation, and material moving		resources, construction, and maintenance		Compensation
oviding ³	prov							component
Percent	Cost	Percent	Cost	Percent	Cost	Percent	Cost	
		_	\$39,02	100.0	\$27.45	100.0	\$34,94	olal compensation
1	\$33,30	100.0 66.3	25.68	65.8	18.07	65.8	23,34	Wages and salaries
	22.59					33,2	1	•
	10.31	33.7	13,14	34.2	9.38		11.61	Total benefits
	2.33 1.13	3.4	1.31	3.0	0.82	2.7	0.94	Vacation
2.0	0.68	2.2	0.88	2.0	0.55	1.8	0.81	Holday
	0.15	0.3	0,10	6.0	0.07	0.3	0,10	Personal
	0.97	3.8	1.49	3.6	0.99	3.0	1,03	Supplemental pay
	0.20 0.05							Overtime and premium ⁴
	0.72	2,1	0.84	1.3	0,35	0.8	0.27	Nonproduction benuses
8.7	2.88	9.4	3.67	10.8	2.98	9.3	3.26	Insurance
0.1	0.04 2.75		0.06 3.47			8.9		Health
1 5.7	0.05 0.04	0.2	0.08 0.05	0.2	0.06 0.06	0.2 0.1	0.08	Short-term disability
8.2 0.1 0.1	1.69	1	- 1	ł			1	
0.1 0.1	1.09	3.1 2.4	1.21	2.6 1.8	0.72	4.3	1,49 0,61	Defined benefit
0.1	0.60	8.4	3.29	9,3	2.55	9.6	3.35	Legally required benefits
0.1 0.1 5.1 3.3 1.8 7.3	2.43		2.19 1.76	5.6 4.5		5.6 4.5	1.98	Social Security and Medicare
0.1 0.1 5.1 3.3 1.8 7.3 5.5	2.43 1.83	5.6 4.5					0.38	11-7
0.1 0.1 5.1 3.3 1.8 7.3 5.5 4.4 1.1	2.43 1.83 1.45 0.38	4,5 1,1	0.43	1.1	0.30	1.1		Medicare
0.1 0.1 5.1 3.3 1.8 7.3 5.5 4.4	2.43 1.83 1.45	4,5		1.1 0.1 0.7 2.9	0.30 0.03 0.18 0.80	0.1 0.7 3.2	0.03 0.25 1.11	Federal unemployment insurance
13 55 37 15 97 20 72 18	1. 0.9 0.1 0.2 0.0 0.7 2.8 0.0 2.7 0.0 0.0	2.2 0.6 0.3 3.8 1.5 0.2 2.1 9.4 0.2 6.9 0.2 0.1 5.5 3.1 2.4	0.88 0.25 0.10 1.49 0.58 0.08 0.84 3.67 0.08 0.05 2.16 1.21 0.95	2.0 0.7 0.3 3.6 2.0 0.3 1.3 10.8 0.1 10.3 0.2 4.5 2.6 1.8 9.3 5.8 4.5	0.55 0.20 0.07 0.99 0.55 0.08 0.38 2.98 0.04 2.82 0.06 0.06 1.22 0.72 0.50 2.55 1.53	1.8 0.3 3.0 2.0 0.1 0.8 9.3 0.1 8.9 0.2 0.1 6.0 4.3 1.7	0.81 0.21 0.10 1.03 0.71 0.08 0.27 3.28 0.04 3.11 0.08 0.03 2.10 1.49 0.61 3.35 1.98	Holdsy Sick Personal Supplemental pay Overtime and premitum Shit differentials Nonproduction benuses Instrance Life Health Short-term disability Long-term disability Confred benefit Defined contribution Legally required benefits Social Security Social Security Instrance Social Security Legally required benefits Social Security Social Secur

Source: Employer Costs for Employee Compensation - September 2016. U. S. Department of Labor, Bureau of Labor Statistics, December, 2016

Includes workers in the private nonfarm economy excluding households and the public sector excluding the Federal government.

Includes mining, construction, and manufacturing. The agriculture, forestry, farming, and hunting sector is excluded.

Includes utilities; wholesate trade; retail trade; transportation and warehousing information; finance and insurance; real estate and rental relatives; professional and technical services; management of companies and enterprises; entertailize and waste services; exceptional services; health care and social satisfaction; ext.e, entertainment and recreation; secontomodation and food services; other services, exceptional public administration; and public administration; and public administration.

Includes premium pay (such as overtime, weekends, and holidays) for work in addition to the regular work schedule.

Cost per hour worked is \$0.01 or less.

Less than .05 percent.

Social Security refers to the Old-Age, Survivors, and Disability Insurance (OASDI) program.

Estimated annual value of household services

	Hours per week spent in non-market work	Hourly wage ²	Annual dollar value (2010\$)
MALES	14.13	\$10.17	\$ 7,472
FEMALES	22.12	\$10.17	\$11,698
	Hours per week		
	spent in child care	Hourly wage ²	Annual dollar value (2010\$)
MALES	2.89	\$10.17	\$ 1,528
FEMALES	6.42	\$10.17	\$ 3,395

Sources:

- 1. "Time Use During the Great Recession", Mark Aguiar, Erik Hurst, and Loukas Karabarbounis, American Economic Review, August, 2013, 103(5): 1664-1696 and Online Appendix.
- 2. Mean hourly wage, maids and housekeeping cleaners, Occupational Employment and Wages, 2010, Bureau of Labor Statistics, United States Department of Labor.

Curriculum Vitae

Gary M. Crakes

Birthdate: July 2, 1953

Home: 860 Ward Lane Phone: (203) 272-1205 Cheshire, CT 06410 Fax: (203) 250-8452

Education

- Ph.D. (Economics) 1984, University of Connecticut
- M.A. (Economics) 1976, University of Connecticut
- B.A. (Economics) 1975, Central Connecticut State College

Fellowships and Honors

- 2017 Biographical listing, Who's Who in America
- 2004 Honored, Trial Lawyers Care, Association of Trial Lawyers of America, for pro bono economic services, September 11th Victim Compensation Fund
- 1998 School of Business Outstanding Teacher Award
- 1987 University Teacher of the Year Award
- 1985 Member, State of Connecticut Senior Economist Examination Committee
- 1983 Richard D. Irwin Fellowship
- 1983 University of Connecticut Dissertation Fellowship
- 1975-1976 University of Connecticut Pre-doctoral Fellowship

Professional Organizations

American Economic Association
Eastern Economic Association
Omicron Delta Epsilon
National Association of Forensic Economists
American Academy of Economic and Financial Experts
American Association of University Professors
National Association of Business Economics

Professional Experience

- 1981 Economic consultant, Maher, Crakes, and Associates
- 2011 Professor Emeritus, Department of Economics and Finance, School of Business, Southern Connecticut State University
- 1989 2011 Professor, Department of Economics and Finance, School of Business, Southern Connecticut State University
- 1991-1995 Chairman, Department of Economics and Finance, School of Business, Southern Connecticut State University
- January 1988-June 1988 Visiting Professor, Department of Behavioral Science and Community Health, School of Dental Medicine, University of Connecticut Health Center
- September 1985-August 1989 Associate Professor, School of Business, Southern Connecticut State University (tenured, 1986)
- August 1980 August 1985 Assistant Professor, School of Business, Southern Connecticut State University
- January 1979-May 1980 Instructor, University of Connecticut (Hartford)
 June 1976-December 1978 Research Assistant, University of Connecticut Health
 Center. Research Assistant, School of Agriculture, University of Connecticut

Publications

Journals

- Crakes, G. and Cottrill, M. "The Connecticut State Income Tax:
 Progressive, Regressive, and Proportional," <u>Journal of the American</u>
 Academy of Business, (September, 2007)
- Cottrill, M. and Crakes, G. "A Different Look at "Pay for Performance":
 Returns to Bench Strength in the NFL," The Business Review, Cambridge,
 (December, 2004).
- Beazoglou, T., Crakes, G., Doherty, N. and Heffley, D. "Determinants of Dentists' Geographic Distribution," <u>Journal of Dental Education</u> (November, 1992)
- Doherty, N. and Crakes, G. "Estimating the Costs of Public Dental Programs: Mobile Clinics," Community Dental Health (Spring, 1987).
- Crakes, G. "A Comparison of Economic Estimates of Loss with Jury Awards and Pre-verdict Settlements," <u>Business Journal</u> (Fall, 1985).
- Doherty, N. and Crakes, G. "Economic Specification of Cost Estimates in Dental Programs," Journal of Dental Research (June, 1985).
- Doherty, N. and Crakes, G. "Adjusting Social Program Costs for Research and Evaluation Activities," <u>Evaluation Review</u> (August, 1980).
- Doherty, N. and Crakes, G. "Commentary: Reply to Joan Quinn," <u>Inquiry</u> (Summer, 1980).
- Doherty, N., Horowitz, P. and Crakes, G. "Real Costs of Dental Care in Private and Public Practice," Medical Care (January, 1980).
- Doherty, N. and Crakes, G. "The Impact of a Change in Regulation on Costs in an Experimental Program," <u>Inquiry</u> (Summer, 1979).

Proceedings

- Crakes, G. with Cottrill, M. "The Growth of Student Indebtedness and the Role of Higher Education as a U.S. Response to Globalization,"

 Proceedings of the Global Conference on Business & Economics,

 Association for Business & Economics Research, October, 2007
- Crakes, G. with Cottrill, M. "The Rising Relative Price of Higher Education and the U.S. Response to Offshore Outsourcing,"

 Proceedings of the New England Business Administration Association,
 May, 2007.
- Crakes, G. with Cottrill, M. "More on "Pay for Performance"-The Disruptive Effect of Star Power in the NFL," Proceedings of the New England Business Administration Association, May, 2005.
- Crakes, G. with Crakes, A. "Education, Earnings, and the NCAA Student Athlete," <u>Proceedings of the New England Business Administration</u>
 <u>Association</u>, May, 2004.

- Crakes, G. with Cottrill, M. and Crakes, J. "Context for the Medical Malpractice Insurance Debate," <u>Proceedings of the Conference on Emerging Issues in Business and Technology</u>, October, 2003.
- Crakes, G. with Thorson, J. and Cottrill, M. "The Impact of Law Firm Concentration on Lawyers' Salaries," Proceedings of the New England Business Administration Association, April, 2000.
- Crakes, G. with Thorson, J. and Cottrill, M. "Are Baseball Players
 Overpaid? An Analysis of Major League Baseball Salaries," Proceedings
 of the Northeast Business & Economics Association, October, 1998.
- Crakes, G. with Cottrill, M. "The Connecticut State Income Tax and the Equal Sacrifice Rule," <u>Proceedings of the New England Business</u>
 Administration Association, November, 1997.
- Crakes, G. with Cottrill, M. "Banking It Before the Bar: Legal Compensation Trends in Major Markets," <u>Proceedings of the Northeast</u> Business & Economics Association, September, 1997.
- Crakes, G. with Cottrill, M. "Young and Old Scholars," <u>Proceedings of the Eastern Case Writers Association/Eastern Academy of Management</u>, May, 1994.

Abstracts

Crakes, G. and Doherty, N. "Costs of Public Dental Clinics Under Capacity Utilization," Journal of Dental Research (January, 1979).

Technical Reports

Doherty, N., Horowitz, P. and Crakes, G. "Analysis of Economic Factors Associated with Providing Incremental Dental Care to Children" for the National Institute of Health, United States Public Health Service, 1978.

Other

- Economic Consultant, 4th edition, 1995, Recovery for Wrongful Death and Injury: Economic Handbook, Stuart M. Speiser and John Maher, Clark, Boardman, & Callaghan, New York, N.Y..
- Economic Consultant (with J. Maher), 3rd edition, 1988 Recovery for Wrongful Death and Injury: Economic Handbook, Stuart M. Speiser, Bancroft, Whitney/Lawyers Cooperative Publishing, Rochester, N.Y..
- Crakes, G.M. "CSUS Chief's Bonus Appalls," <u>Hartford Courant</u>, December 20, 2009.
- Crakes, G.M. "Competition Causing Disagreement Over Deregulation," <u>New Haven Register</u>, August 6, 1981.

Conferences

Papers Presented

- Co-author of paper titled "Do Older Workers Respond to Incentives?

 Evidence From the Senior PGA Tour" (with M. Cottrill and J. Thorson, presenter) presented at the annual Connecticut State University Research Conference, October, 1999, Eastern Connecticut State University.
- Presented co-authored paper titled "The Intra and Inter-State Distribution of Dentists" (with T. Beazoglou and D. Heffley) at the annual meeting of the Eastern Economic Association, March 3, 1989 in Baltimore, MD.
- Co-author of paper titled "Determinants of Dentists' Geographic Distribution" (with T. Beazoglou and D. Heffley, presenter) presented at the meeting of the American Association of Dental Research, March 15, 1989 in San Francisco, CA.
- Presented co-authored paper titled "Estimating Dental Practice Production Functions with Alternative Output Measures" (with T. Beazoglou) at the annual meeting of the Eastern Economic Association, March 4-7, 1987 in Washington, D.C.
- Presented paper titled "A Comparison of Economic Estimates of Loss with Jury Awards and Pre-verdict Settlements" at the meeting of the Atlantic Economic Society, August 29 - September 1, 1985 in Washington, D.C.
- Presented co-authored paper titled, "A Re-examination of the Returns to Scale of Dental Practices" (with T. Beazoglou) at the annual meeting of the Eastern Economic Association, March 21-23, 1985 in Pittsburgh, PA.
- Presented co-authored paper titled "Economic Specification of Costs of Dental Programs" (with N. Doherty) at the annual meeting of the Eastern Economic Association, March 21-23, 1985 in Pittsburgh, PA.

Other

- Chairperson of session, "Economics" at the annual meeting of the New England Business Administration Association, April, 1993 in New Haven, CT.
- Chairperson and organizer of session, "Health Economics" at the annual meeting of the Eastern Economic Association, March 28, 1992 in New York City, NY.
- Discussant of paper titled, "Massachusetts Hospitals in the Eighties: Financial Analysis of Large Urban and Other Hospitals" at the annual meeting of Northeast Business Economics Association, November 7, 1991 in Stamford, CT.

- Discussant of paper titled, "Female Work Experience: Voluntary vs.
 Involuntary Labor Force Activity" at the meeting of the National
 Association of Forensic Economists, March 4, 1989 in Baltimore, MD
- Discussant of paper titled "Diogenes' Expenses: The Costs to the Court of Seeking Truth in Medical Malpractice Cases" at the annual meeting of the Eastern Economic Association, March 12, 1988 in Boston, MA.
- Discussant of paper titled "Present Value and the Structure of Interest Rates" at the meeting of the National Association of Forensic Economists, March 11, 1988 in Boston, MA.
- Chairperson of session, "Topics in Health Economics" at the annual meeting of the Eastern Economic Association, March 11, 1983 in Boston, MA.
- Discussant of paper titled "The Nursing Shortage and Its Associated Planning Problems" at the annual meeting of the New England Business and Economics Association, November 5, 1982 in Springfield, MA.
- Coordinator and moderator for "The Role of Preventative Care: Is It a Healthy Alternative?" sponsored by the Joint Council on Economic Education, April 23, 1981, Southern Connecticut State College.